

**Remarks/Arguments:**

By this Supplemental Preliminary Amendment, Applicants have amended claims 1 and 2. Claims 3-5 and 9-17 are cancelled. New claims 18-23 are added. Accordingly, claims 1-2, 6-8, and 18-23 are pending. Applicants have amended the claims to clarify the content of the pending claims and to make the differences between the pending claims and the references listed in the IDS's more clear, without introducing new matter.

**Support for Claim Amendments**

The support for the claim amendments is described below.

The feature, "a refrigerating cycle which is formed by sequentially connecting a compressor which compresses a refrigerant which contains carbon dioxide," as recited in claim 1, is supported by the description on page 23, line 23 to page 24, line 14, of the specification and Fig. 1.

The feature, "water which circulates in a water cycle," as recited in claim 1, is supported by description of the water in a hot water cycle on page 24, lines 11-14, of the specification and is supported by the description of "cooling water in a water circuit which is circulated" on page 25, lines 23-24, of the specification.

Further, the feature, "air conditioning capacity is adjusted by adjusting a degree of opening of the second decompressor at the time of heating and dehumidifying," as recited in claim 1, is supported by the description on page 29, line 15 to page 30, line 25, of the specification.

The addition of new claim 18 is supported by the description on page 51, lines 11-13 and page 55, line 17 to page 57, line 15 of the specification and the flow chart of Fig. 15.

The addition of new claim 19 is supported by the description on page 57, line 16 to page 58, line 3, of the specification.

The addition of new claim 20 is supported by the description on page 58, line 21 to page 61, line 5, of the specification.

### **Discussion of the Cited References**

Claim 1 includes features which are neither disclosed nor suggested by the references listed in the Information Disclosure Statements filed June 30, 2004 and May 10, 2005, namely: "the air conditioning capacity is adjusted by adjusting a degree of opening of the second decompressor at the time of heating and dehumidifying."

1. **Japanese Laid-Open Patent 2002-19443 ("the JP 2002-19443 reference")**

In the JP 2002-19443 reference, there is disclosed a refrigerating cycle for an air conditioning unit for vehicle use. The refrigerating cycle is formed by sequentially connecting a compressor, a first heat exchanger, a first flow rate adjusting valve, a third heat exchanger, a second flow rate adjusting valve, a second heat exchanger and an accumulator. As described in Table 1 in paragraph 0056 of the JP 2002-19443 reference, the second flow rate adjusting valve of the JP 2002-19443 reference is controlled to assume a fully opened state during the dehumidifying and heating operation. Therefore, the JP 2002-19443 reference does not disclose that "air conditioning capacity is adjusted by adjusting a degree of opening of the second decompressor at the time of heating and dehumidifying," as recited in claim 1.

2. **Other Cited References**

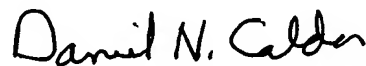
Japanese Laid-Open Patent Sho59(1984)-225255 discloses a technique which performs the heat exchange between refrigerant and cooling water in a condenser of a refrigerating cycle. Japanese Laid-Open Patent 2002-81768 discloses a technique which detects a discharge temperature of a compressor and controls a decompressor in response to the detected discharge temperature in a heat pump cycle. Japanese Laid-Open Patent 2000-88360 discloses a technique in which in a first heat transfer medium circulation path (a refrigerating cycle), which sequentially connects a compressor, a first heat exchanger, an expansion valve, and a second heat exchanger, there is arranged a bypass pipe passage which connects the outlet of the compressor and the inlet of the second heat exchanger. A temperature sensor is installed on a pipe passage at the outlet of the second heat exchanger, and the degree of opening of the expansion valve is controlled in response to a signal from the temperature sensor. None of these references disclose that "air conditioning capacity is adjusted by adjusting a degree of opening of

the second decompressor at the time of heating and dehumidifying," as recited in claim 1.

**Conclusion**

Applicants respectfully contend that all of the features of claim 1 as presently amended are neither disclosed by any one of the IDS references nor suggested by any one of the IDS references or by a combination of the IDS references. Thus, Applicants respectfully assert that claim 1 and the claims dependent thereon are distinguishable over the IDS references. Favorable consideration is respectfully requested.

Respectfully submitted,



Daniel N. Calder, Reg. 27,424  
Attorneys for Applicants

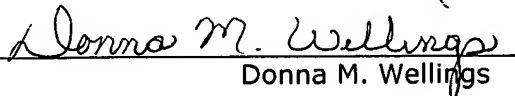
DNC/PZ/dmw

Dated: November 10, 2005

P.O. Box 980  
Valley Forge, PA 19482-0980  
(610) 407-0700

The Commissioner for Patents is hereby authorized to charge payment to Deposit Account No. **18-0350** of any fees associated with this communication.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, with sufficient postage, in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on November 10, 2005.

  
Donna M. Wellings

FP\_I:\MTS\3493US\PREAMEND\_02\_SUP.DOC